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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/083,492
Filing Date: February 27, 2002
Appellant(s): FARCOT ET AL.

James L. Rowland
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed September 17, 2004 appealing from the Office action mailed October 16, 2003.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of appellant's invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 35-38, 40, and 41 stand or fall together and provides reasons, as set forth in 37 CFR 1.192(c)(7) and (c)(8), in the arguments related to the rejection under 35 USC 112, first paragraph.

Appellant's brief includes a statement that claims 6, 38, 41 stand or fall together and provides reasons, as set forth in 37 CFR 1.192(c)(7) and (c)(8), in the arguments related to the rejection under 35 USC 112, second paragraph.

Appellant's brief includes a statement that claims 1-4, 6, 7, 9, 10, 13, 16-18, 23-25, 28-30, 35-38, 40, and 41 do not stand or fall together except for the following two groups of claims: claims 1 and 3 stand or fall together and claims 7, 9, 13, 16, 17, 24, 25, 29, and 30 stand or fall together. Reasons are provided, as set forth in 37 CFR 1.192(c)(7) and (c)(8), in the arguments related to the rejection under 35 USC 103 §(a).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of the claims.

5,909,893	KELLER et al.	6-1999
5380031	VITALI et al.	1-1995

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 35-38, 40, and 41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 35-38 and 40 indicate that the single plate is the only plate of the assembly having the predetermined size and shape. However, the disclosure does not distinguish the single plate from a second plate based upon size and shape. That is, the second plate that does not have the predetermined size and shape is not supported by the original specification. Thus, the limitations that attempt to distinguish the single plate from another plate based on size and shape represent new matter.

Claims 6, 38, and 41 are rejected under 35 U.S.C. 112, second and sixth paragraphs, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 defines means for retaining the screws on the plate and for connecting the plate to the disk when the base is not affixed to the sports apparatus. Claims 38 and 41 define the screws as having means for retaining the plate connected to the base when the screws are not screwed into the sports apparatus. However, the structure

comprising the means is not clear under 35 USC 112, paragraph six, as invoked by Applicants on page 12 of the amendment filed April 17, 2003.

Paragraphs 0039-0044 of the specification disclose a means for retaining the screws on the plate including the diameter of the threaded portion of the screw being substantially equal to the diameter of the corresponding hole in the plate. However, this means would only connect the plate to the disk when the base is not affixed to the sports apparatus if the plate is disposed beneath the base or disk. If the plate were disposed above the base or disk, this means would only retain the screws on the plate and would not connect the plate to the disk. Thus, the claims are unclear as to whether the means includes the screw diameter at the threaded portion relative to the diameter of the hole in the plate alone or the screw diameter at the threaded portion relative to the diameter of the hole in the plate in combination with the location of the plate being below the base or disk.

In section B. 3. of the remarks to the amendment filed August 18, 2003, Applicants indicate that the limitations in which the plate is disposed in the lower surface of the base or disk are only present in dependent claims. Since the means plus function limitation in question appears in independent claims 6 and 38, for the purposes of examination the means have been interpreted as being the screw diameter at the threaded portion relative to the diameter of the hole in the plate alone without locating the plate below the base or disk. This means would connect the plate to the disk when the base is not affixed to the sports apparatus to the same extent as the claimed

means. Applicants are invited to further clarify the structure of the means capable of performing the claimed functions.

Claims 1-4, 6, 7, 9, 10, 13, 16-18, 23-25, 28-30, and 35-38, 40, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keller et al. US 5,909,893 in view of Vitali et al. US 5,380,031.

Keller et al. discloses an assembly for retaining a boot on a sports apparatus. See figure 3; column 2, lines 44-50; and column 4, lines 6-29. The assembly has a disk 1 that retains a base 9 and is supported above a through opening of the base, wherein the disk includes four elongated holes 10 that extend through a thickness of the disk, are parallel to one another, are aligned in pairs, are elongated in the same direction, and are across from one another. Also, two generally rectangular plates 12 that are parallel to the disk and are housed in a cavity 11 of the disk, wherein the cavity has a generally parallelepipedic contour. Each plate includes two holes 13 extending through a thickness of the plate and each plate slides along the length of the elongated holes. At least two screws 8 extend through the elongated holes of the disk, the holes of each plate, and into an upper surface of the sports apparatus.

Keller et al does not disclose a retaining means, wherein the means is a plate hole with a diameter substantially equal to the diameter of the threaded portion of the screw, and the screw head and threaded portion interact with the plate hole to retain the screw on the plate as discussed in paragraphs 0039 – 0043. Keller et al. does not disclose that the plate is made of plastic or metal. Keller et al. does not disclose the

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precise thickness of the plate, although it appears to be between 0.1 mm and 1.0 mm based upon the proportions depicted in Figure 3. In addition, the plate is not square with four holes spread to the four corners or three holes arranged at vertices of a triangle, and the size and shape of one plate is not different from the size and shape of the other plate.

Vitali et al. teaches the old and well known retaining means for retaining screws on a plate, and teaches plate materials and thickness. See Figures 1-6 and column 3, lines 4-16, 23-29, 39-52, and 63-67. The retaining means includes a plate hole 7 with a diameter 9 substantially equal to the diameter of the threaded portion of a screw 1. The screw is sized, relative to the plate hole, to be forcibly screwed through the plate hole, thereby allowing the screw head and threaded portion to interact with the plate hole to retain the screw on the plate when assembled. Also, the plate may be made of either plastic or metal and has a thickness of between 0.1 mm and 1.0 mm. From the teachings of Vitali et al., providing the assembly of Keller et al. with a retaining means for retaining the screws on the plate would have been obvious to one of ordinary skill in the art at the time the invention was made. This would aid in assembly by precisely providing a desired screw length protruding beneath the lower surface of the binding. Also, from the teachings of Vitali et al., providing the assembly of Keller et al. with a plate made of plastic or metal and of the claimed thickness would have been obvious to one of ordinary skill in the art at the time the invention was made. This would ensure that the plate has sufficient strength.

In regard to the generally square shape of the plate, providing the plates of Keller et al. in a generally square shape, rather than two rectangles, represents an obvious design choice that was within the purview of one of ordinary skill in the art at the time the invention was made. Also, providing the plates with different sizes and shapes represents an obvious design choice that was within the purview of one of ordinary skill in the art at the time the invention was made. The court has held that the shape and size of a component is a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration was significant. *In re Dailey*, 149 USPQ 47 (CCPA 1966) and *Gardner V. TEC Systems, Inc.*, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 225 USPQ 232 (1984). Moreover, in paragraph 0037 on page 7 of the specification Applicants state that the shape of the plate is not a critical feature.

(11) Response to Argument

1. Claims 35-38, 40, and 41 Fail to Comply with the Written Description Requirement of 35 USC §112, First Paragraph

Claims 35-38 and 40 indicate that the single plate is the only plate of the assembly having a predetermined size and shape. This structural comparison between plates requires the presence of a second plate, and the second plate is specifically recited in the fourth line of each of claims 35, 36, and 37. However, the disclosure fails

to provide support for the second plate or its structural parameters. The original disclosure was not concerned with distinguishing the present invention from the prior art arrangement having two plates. Such distinctions were claimed after the examiner issued a rejection in view of Keller et al., which has the two-plate arrangement. Consequently, there is no basis for the claimed structural comparison in the disclosure, and the required second plate that is necessary to the comparison is new matter.

Appellants allege that the reference to the second plate in the claims is permissible under the decisions in *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and *In re Smythe*, 178 USPQ 279, 285 (CCPA 1973). However, neither of these decisions is relevant to the new matter issue in this case.

In re Wright indicates that a phrase that is open to a different interpretation presents issues of scope, rather than support for the phrase, and that subject matter of a claim does not have to be described literally to satisfy the description requirement. Here, although the different interpretations and scope of the phrase "single plate" is relevant to the rejection under 35 USC §103(a) discussed below, it is not relevant to the issue of new matter raised by the rejection under 35 USC §112, first paragraph. The rejection under 35 USC §112, first paragraph, is not based on a difference of interpretation, but a lack of support for claim structure (i.e.: the second plate). Also, although the subject matter of a claim does not have to be described literally to satisfy the description requirement, the description must include some description of the structure if that structure is to define the claimed invention. Thus, *In re Wright* fails to

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offer proper guidance as to the appropriateness of the rejection under 35 USC §112, first paragraph.

Furthermore, *In re Smythe* indicates that an inherent function, operation according to a theory, or advantage of a device is disclosed even though the applicant says nothing about it. However, the claimed comparison between the first and second plates does not involve an inherent function, operation, or advantage. Rather, the claimed comparison involves the structural characteristics of an undisclosed second plate. Thus, *In re Smythe* fails to offer proper guidance as to the appropriateness of the rejection under 35 USC §112, first paragraph.

Since the original disclosure fails to provide any description of the second plate required by claims 35-38 and 40, appellants have not conveyed with reasonable clarity to those skilled in the art, as of the filing date of the original disclosure, that he was in possession of the claimed invention. Accordingly, the rejection under 35 USC §112, first paragraph, should be affirmed.

2. Claims 6, 38, and 41 Fail to Comply with 35 USC §112, Second Paragraph

Claims 6, 38, and 41 each recite “means” for performing a specific function. On page 12 of the amendment filed April 17, 2003, appellants indicated that the “means for” limitations are intended to invoke the requirements of 35 USC §112, sixth paragraph, which requires the structure comprising the “means” to be established in the disclosure.

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However, the structure capable of performing the claimed functions is not clearly established in the disclosure and, as a result, the scope of the "means" cannot be determined with certainty.

Claim 6 requires the means to retain the screws on the plate. The structure described in paragraphs 0039-0044 could perform this function since the threaded portion 57 of the screw and the head 55 of the screw will prevent the screws from being dislodged from a plate disposed between the threaded portion and head. However, claim 6 also requires the means to connect the plate to the disk when the base is not affixed to the sports apparatus. The structure described in paragraphs 0039-0044 could not perform this function since the threaded portion and head portion of the screw will only prevent the screws from being dislodged from a plate disposed between the threaded portion and head. The threaded portion and head portion of the screw will not, alone, connect the plate to the disk when the base is not affixed to the sports apparatus. Therefore, the structure described in the specification that most closely represents the "means" does not perform all of the required functions and the specification fails to establish the structure that comprises the claimed "means".

Although not explained in the specification, one of ordinary skill in the art could extrapolate from the figures that the structure of the claimed "means" might involve the thread and head features of the screws in combination with the specific location of the plate. However, the Figures depict two possible locations for the plate. The plate may be located beneath the disc (Figures 1 and 2) or the plate may be located on the upper

surface of the disc (Figure 5). Neither plate position is disclosed in the specification as being associated with the claimed "means."

When the plate is located beneath the disc, the screw features and the plate would cooperate to connect the plate to the disk when the base is not affixed to the sports apparatus. This arrangement was defined in dependent claims 8, 15, 33, and 34, which were indicated as having allowable subject matter for defining this arrangement. When the plate is located above the disc, nothing would connect the plate to the disk when the base is not affixed to the sports apparatus, as acknowledged by appellants on page 12 of their brief.

However, requiring a reader to extrapolate the structure comprising the claimed "means" fails to particularly point out and distinctly claim the subject matter which the appellant regards as the invention. Moreover, such extrapolation would not clearly establish the structure of the claimed "means."

Similarly, claims 38 and 41 define means that retain the plate connected to the base when the screws are not screwed into the sports apparatus, and the "means" is a feature of the screws alone. As discussed above in relation to the structure described in paragraphs 0039-0044 of the specification, the thread and head features of the screws will not, alone, retain the plate connected to the base when the screws are not screwed into the sports apparatus. Performance of this function requires the screw features to be combined with a plate located beneath the base. However, the "means," which is a feature of the screws alone, cannot include the plate since the screws do not comprise the plate. Also, inclusion of the plate in the "means" would require extrapolation on the

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part of the reader. Therefore, the claims fail to particularly point out and distinctly claim the structure of the claimed "means."

3. **The Rejection of Claims 1-4, 6, 7, 9, 10, 13, 16-18, 23-25, 28-30, 35-38, 40, and 41 as Being Unpatentable Under 35 USC §103(a) Should be Affirmed**

a. **A "Single" Plate**

A central issue in this case is the scope of the term "single" as used in the claims. Both the present invention and the apparatus of Keller et al. US 5,909,893 utilize plates to assist in positioning screws relative to a base and a disc. The present invention utilizes only one plate, while Keller et al. utilize two plates. In claims 1-4, 6, 7, 9, 10, 13, 16-18, 23-25, 28-30, 35-38, 40, and 41, Appellants have attempted to distinguish the present invention from the two-plate arrangement by defining the present invention as including a "single" plate. "Single" is not defined in the specification since this feature of the present invention only became relevant after the examiner issued a rejection in view of Keller et al. Since it is not defined in the specification, the meaning of "single" is interpreted according to its plain and ordinary meaning. However, under the broadest reasonable interpretation standard, the plain meaning of the term "single" does not exclude the presence of a second plate. Thus, the rejected claims fail to distinguish over the prior art.

i. Plain Meaning of "Single"

In support of their position, appellants offer numerous definitions of "single" and cite the use of "single" by the USPTO. The definitions and usage cited by appellants are within the plain and ordinary meaning of "single." However, they are not the only definitions and usage of "single" within the plain and ordinary meaning. In applying the broadest reasonable interpretation standard to the claims, the additional definitions of "single" must be considered by the examiner. In this case, the additional definitions of "single" do not exclude other objects, such as a second plate.

Webster's II New Riverside University Dictionary, Houghton Mifflin Co., Boston, Mass., 1994, defines "single" as "separate from others" and "distinct." This ordinary meaning does not imply one and only one and is given to the word "single" in the examiner's interpretation of the claims. The first plate of Keller et al. is separate from the second plate of Keller et al. Also, the first plate of Keller et al. is distinct from the second plate. Thus, the first plate of Keller et al. is a "single" plate.

Appellants assert that the definition given to "single" must be based upon the context of appellants' disclosure. However, since "single" was not an issue in the original disclosure, "single" is not given a particular context within the disclosure. Appellant further alleges that the definition of "single" relied upon by the examiner is not within the context of the disclosure because it is "in the context of identifying things...separately...". *Appeal Brief*, page 17, lines 8 and 9. However, appellants' claims consistently attempt to identify things (i.e.: plates) separately, and the examiner's definition is consistent with this context. Moreover, appellants' argument that the

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selected definition of “single” must be within the context of the disclosure suggests that limitations from the specification must be read into the meaning of “single.” Such a practice is impermissible.

Appellants further assert that the definition given to “single” must be consistent with a prior usage of “a” or “single” by the USPTO. However, usage of one meaning of “a” or “single” by the USPTO does not prevent the USPTO from subsequently interpreting a claim according to other meanings of the words.

ii. Transitional Phrases

On page 19 of the Brief, Appellants misconstrue the examiner’s earlier comments regarding their choice of “comprising” rather than “consisting of” in the claims. In noting that the claim limitations involving the term “single” are preceded by broad transitional phrases rather than narrow transitional phrases, the examiner was not suggesting that appellants amend the claims by replacing “comprising” with “consisting of.” Rather, the examiner was further demonstrating that the scope of the limitations involving the term “single” was broad and that they do not limit the claimed invention to only one plate.

iii. Distinguishing Additional Plates by Size and Shape

On pages 19 and 20 of the Brief, appellants express reasons why they chose to distinguish the single plate from other plates based on size and shape in dependent claims 35, 36, and 37. However, regardless of the reasons why appellants chose this

claim language, these limitations have the effect of suggesting that the claims are not limited to only one plate, which conflicts with the arrangement of Keller et al.

b. Combination of Keller et al. and Vitali et al.

In the second full paragraph on page 21 of the Brief, appellants offer the conclusory statement that:

“it would not have been clear to one of ordinary skill in the art how either of the thin plates 12 of KELLER could have been modified to have incorporated the structures taught by Vitali for the purpose of holding KELLER’s screws relative to the plates12.”

However, “incorporating” the structures taught by Vitali et al. into the plates of Keller et al. involves the bodily incorporation of the structure of one reference into the structure of another reference, which is not suggested by the examiner. The modification suggested by the examiner and taught by Vitali et al. is to arrange the diameter of the threaded portions of the screws of Keller et al. and the diameter of the holes in the plates of Keller et al. such that the diameters are substantially equal and the screws must be forcibly screwed through the plate holes. Vitali et al. discuss this common fasteneing arrangement in column 3, lines 4-16, 23-29, 39-52, and 63-67. Appellants fail to offer a reason why the plates and screws of Keller et al. could not be arranged in this way. Furthermore, this arrangement would retain the screws on the plate as required by the claims since the plate would be confined between the threaded portion of the screws and the head of the screws.

Although this arrangement would not connect the plate to the disk when the base is not affixed to the sports apparatus, appellants fail to particularly point out and distinctly claim a structure in the present invention that performs this function. Screw features in combination with a plate located beneath the disc could perform this function as extrapolated from the figures, but this specific arrangement was defined in dependent claims that were indicated as being allowable. Since the limitation requiring the structure ("means") to perform this function violates 35 USC § 112, second paragraph, as discussed above, the examiner has interpreted the means as being the screw diameter at the threaded portion relative to the diameter of the hole in the plate alone without locating the plate below the base or disk. Vitali et al. teach this structure.

Appellants further assert that utilizing the teachings of Vitali et al. in the apparatus of Keller et al. would not allow one to realize the objective of Vitali et al. However, appellants misconstrue the objective of Vitali et al. as being to hold the screws relative to the base as the base is placed upon the ski. This is not the objective of Vitali et al. The objective of Vitali et al. is stated in column 2, lines 13-17, as being "...to determine...the screw length which protrudes beneath the lower surface of the ski." Modifying the structure of Keller et al. based upon the teachings of Vitali et al. would achieve this objective. Moreover, modifying the structure of Keller et al. based upon the teachings of Vitali et al. would achieve the objective suggested by appellants since the plates, to which the screws are coupled, would maintain their position in the cavities and relative to the base as the base is placed upon the ski, despite the ability of the plates to be removed from the apparatus.

c. The Screws are “Forcibly Screwed” Into the Plate

Appellants contend, on page 22 of the Brief, that Keller et al. do not teach or suggest that the screws are “forcibly screwed” into the plate. This is true. However, Vitali et al. teach such an arrangement in column 3, lines 50-52, which state “...the screw 1 can be inserted by force into the hole 7...” Since the rejection of the claims is based upon the combination of Keller et al. and Vitali et al., the teachings of Vitali et al., as applied to Keller et al., satisfy this limitation.

d. Plate on Lower portion of Disk in Claim 2

Appellants assert that the plate of Keller et al. is not located on a lower portion of the disk. However, appellants do not specify the structure that constitutes the “lower portion.” The phrase “lower portion” must be interpreted under the broadest reasonable interpretation within the plain meaning of the terms. *Webster’s II New Riverside University Dictionary*, Houghton Mifflin Co., Boston, Mass., 1994, defines a “portion” as “a part of a whole.” Since a surface is a part of a whole, any surface below the upper surface of disk 1 of Keller et al. is a lower portion. As depicted in Figure 4, surface 11 is a lower portion located below the upper surface of the disk. Plate 12 of Keller et al. is located on surface 11, thereby satisfying the limitation in claim 2 requiring that the plate be located on a lower portion of the disk.

e. Generally Square Plate within Generally Parallelepipedic Cavity

On page 23 of the Brief, appellants offer the unsubstantiated allegation that neither Keller et al. nor Vitali et al. teach a plate with a generally square shape or a cavity with a generally parallelepipedic shape. Although the plate of Keller et al. is not perfectly square in shape, the shape of the plate, as depicted in Figure 3, is "generally" square. This is particularly true in regard to the shape of the plate at its lateral cross section, which is perpendicular to the cross section shown in Figure 3. Similarly, although the cavity of Keller et al. is not perfectly parallelepipedic in shape, the shape of the cavity, as depicted in Figure 3, is "generally" parallelepipedic.

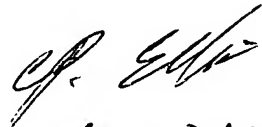
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

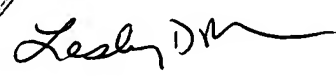

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